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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,161	07/16/2003	Grant R. Thompson	274BOT/US89	4475

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EXAMINER	
LE, HUYEN D	

ART UNIT	PAPER NUMBER
3751	

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,161	THOMPSON ET AL.	
	Examiner	Art Unit	
	Huyen Le	3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05/03/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-8, 10-12, 14-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Holliday (5,127,629).

The Holliday reference discloses a sealing apparatus, comprising: a housing 22 having a bore formed therethrough; a cylindrical member 26 extending the bore in the housing, an external annular sealing lip 54 formed on the cylindrical member 26, the lip 54 being adapted to contact the housing and flex in a sealing relationship, when the cylindrical member 26 is urged toward the housing; and an external annular shoulder 72 formed on the cylindrical member 26 between the sealing lip 54 and the housing 22, the shoulder 72 being adapted to abut the housing 22 only after the flexing of the sealing lip 58 and arrest axial movement of the cylindrical member 26 relative to the housing 22.

Regarding claim 2, the apparatus further comprises a frusto-conical surface 60 on the housing 22; and an annular edge formed on the sealing lip 58, the sealing lip annular edge being positioned to contact the frusto-conical surface 60 of the housing 22 in the sealing relationship, prior to the abutment of the shoulder 72 against the housing 22.

Regarding claim 3, the apparatus further comprises a frusto-conical surface 60 on the housing 22; an frusto-conical surface 70 formed on the annular shoulder 72, the frusto-conical surface 70 of the shoulder 72 being positioned to abut the frusto-conical Surface 60 of the housing 22, after the sealing lip 54 contacts the housing 22.

Regarding claim 5, the lip 54 is adapted to contact the housing 22 as the cylindrical member 26 advances through the bore.

Regarding claim 6, the apparatus comprise a valve bonnet 22 having a bore; a valve stem 26, an annular backseat formed on an inside surface of the bonnet 22, an external sealing lip 54 being adapted to flex and seal against the back seat; annular shoulder 72 formed on the stem 26 and being adapted to abut the backseat only after the flexing of the sealing lip 54 and arrest axial movement of the stem.

Regarding claim 6, the lip 54 is adapted to contact the housing 22 as the stem 26 advances through the bore.

Regarding claims 15-17 and 19, a method of sealing between a cylindrical member 26 and a housing 22 is inherently performed during the normal operation of the apparatus as described above.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Dark et al (4,917,355).

The Dark et al reference discloses a sealing apparatus, comprising: a housing 3 having a bore formed therethrough; a cylindrical member 2 extending the bore in the housing 3, an external annular sealing lip 16 formed on the cylindrical member 2, the lip 16 being adapted to contact the housing 3 and flex in a sealing relationship, when the

cylindrical member 2 is urged toward the housing 3; and an external annular shoulder 17 formed on the cylindrical member 2 between the sealing lip 16 and the housing 3, the shoulder 17 being adapted to abut the housing 3 only after the flexing of the sealing lip 16 and arrest axial movement of the cylindrical member 2 relative to the housing 3.

Regarding claim 2, the apparatus further comprises a frusto-conical surface on the housing 14; and an annular edge formed on the sealing lip 16, the sealing lip annular edge being positioned to contact the frusto-conical surface 14 of the housing 3 in the sealing relationship, prior to the abutment of the shoulder 17 against the housing.

Regarding claim 3, the apparatus further comprises a frusto-conical surface 11 on the housing 3; an frusto-conical surface formed on the annular shoulder 17, the frusto-conical surface of the shoulder 17 being positioned to abut the frusto-conical surface 11 of the housing 3, after the sealing lip 16 contacts the housing 3.

Regarding claim 4, the apparatus comprises first and second frusto-conical surfaces on the housing 3; an annular edge formed on the sealing lip 16, the sealing lip annular edge being positioned to contact the first frusto-conical surface 14 of the housing 3 in the sealing relationship, and a third frusto-conical surface formed on the annular shoulder 17, the frusto-conical surface of the shoulder 17 being positioned to abut the second frusto-conical surface 11 of the housing 3, after the sealing lip 16 contacts the first frusto-conical surface 14 of the housing 3.

Regarding claim 5, the lip 16 is adapted to contact the housing 3 as the cylindrical member 2 advances through the bore.

Regarding claim 6, the apparatus comprise a valve bonnet 3 having a bore; a valve stem 2, an annular backseat formed on an inside surface of the bonnet 3, an external sealing lip 16 being adapted to flex and seal against the back seat; annular shoulder 17 formed on the stem 2 and being adapted to abut the backseat only after the flexing of the sealing lip 16 and arrest axial movement of the stem 2.

Regarding claim 6, the lip 16 is adapted to contact the housing 3 as the stem 2 advances through the bore.

Regarding claims 15-19, a method of sealing between a cylindrical member 2 and a housing 3 is inherently performed during the normal operation of the apparatus as described above.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is 571-272-4890. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huyen Le

Huyen Le
Examiner
Art Unit 3751

HL
December 16, 2004